Title

Tri Nguyen

nguyetr9@oregonstate.edu

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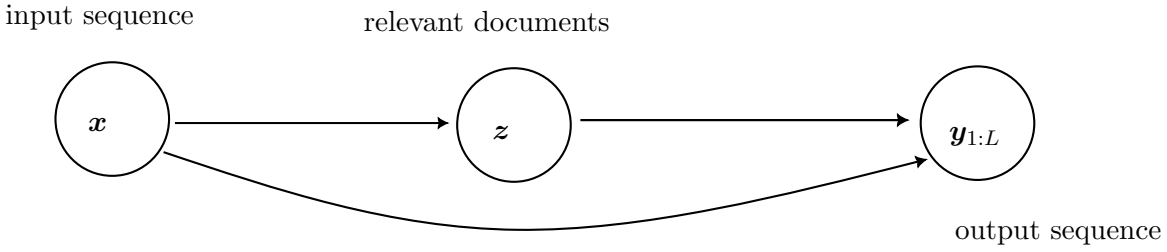

$$
\begin{aligned}
\mathsf{Pr}\left(\boldsymbol{y}_{1:L} \mid \boldsymbol{x}\right) &= \sum_{\boldsymbol{z}} \mathsf{Pr}\left(\boldsymbol{y}_{1:L}, \boldsymbol{z} \mid \boldsymbol{x}\right) \\
&= \sum_{\boldsymbol{z}} \mathsf{Pr}\left(\boldsymbol{y}_{1:L} \mid \boldsymbol{z}, \boldsymbol{x}\right) \mathsf{Pr}\left(\boldsymbol{z} \mid \boldsymbol{x}\right) \\
&\approx \sum_{\text{top K } \boldsymbol{z}\text{'s} \sim \mathsf{Pr}(\boldsymbol{z}\mid\boldsymbol{x})} \mathsf{Pr}\left(\boldsymbol{y}_{1:L} \mid \boldsymbol{z}, \boldsymbol{x}\right) \mathsf{Pr}\left(\boldsymbol{z} \mid \boldsymbol{x}\right) \\
&= \sum_{\text{top K } \boldsymbol{z}\text{'s} \sim \mathsf{Pr}(\boldsymbol{z}\mid\boldsymbol{x})} \prod_{i=1}^{L} \mathsf{Pr}\left(\boldsymbol{y}_i \mid \boldsymbol{z}, \boldsymbol{x}, \boldsymbol{y}_{1:i-1}\right) \mathsf{Pr}\left(\boldsymbol{z} \mid \boldsymbol{x}\right)
\end{aligned}
$$

$$
\begin{aligned}
\mathsf{Pr}\left(\boldsymbol{y}_{1:L} \mid \boldsymbol{x}\right) &= \prod_{i=1}^{L} \mathsf{Pr}\left(\boldsymbol{y}_i \mid \boldsymbol{y}_{1:i-1}, \boldsymbol{x}\right) \\
&= \prod_{i=1}^{L} \sum_{\boldsymbol{z}} \mathsf{Pr}\left(\boldsymbol{y}_i, \boldsymbol{z} \mid \boldsymbol{y}_{1:i-1}, \boldsymbol{x}\right) \\
&= \prod_{i=1}^{L} \sum_{\boldsymbol{z}} \mathsf{Pr}\left(\boldsymbol{y}_i \mid \boldsymbol{y}_{1:i-1}, \boldsymbol{z}, \boldsymbol{x}\right) \mathsf{Pr}\left(\boldsymbol{z} \mid \boldsymbol{x}\right) \\
&\approx \prod_{i=1}^{L} \sum_{\text{top-k } \boldsymbol{z}\text{'s} \sim \mathsf{Pr}(\boldsymbol{z}\mid\boldsymbol{x})} \mathsf{Pr}\left(\boldsymbol{y}_i \mid \boldsymbol{y}_{1:i-1}, \boldsymbol{z}, \boldsymbol{x}\right) \mathsf{Pr}\left(\boldsymbol{z} \mid \boldsymbol{x}\right)
\end{aligned}
$$

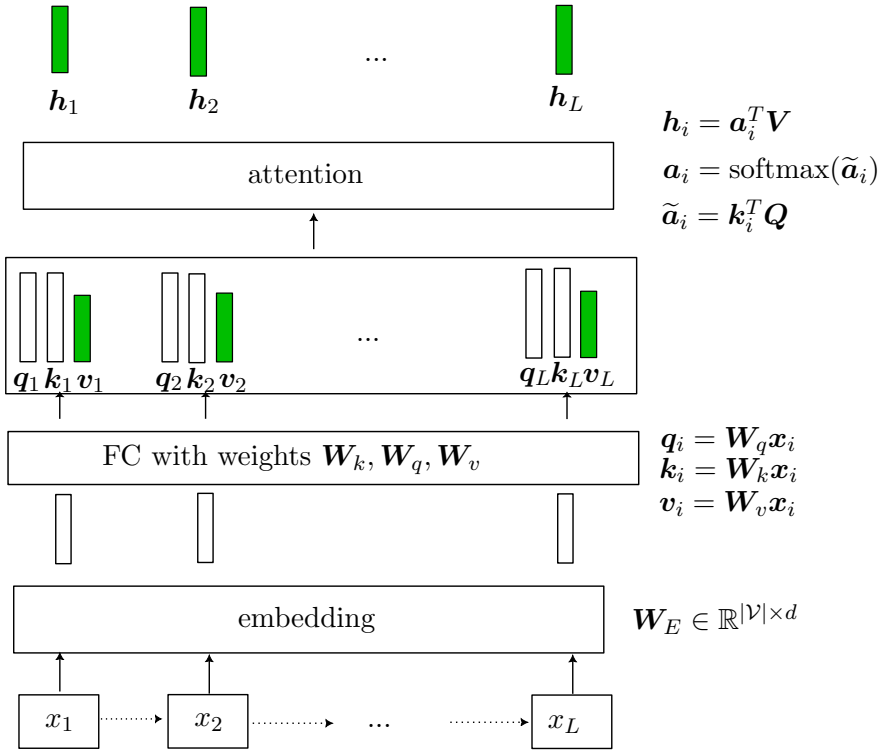

Figure 0.1: abd